

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-22. (CANCELED)

23. (CURRENTLY AMENDED) An immunogenic, HIV-1 Env peptide of 5-150 amino acid residues of LAV_{MAL} Env sequences in Figures 3[[A]]E -3F; ~~wherein at least one amino acid residue of said peptide is substituted in all of the sequences designated LAVBRU, ARV2, and LAVELI in Figures 3A-3F~~ having at least one amino acid substitution at one or more of positions 8, 9, 90, 102, 131, 133, 140, 156, 172, 177, 179, 185, 188, 192, 198, 207, 209, 290, 305, 308, 323, 333, 335, 337, 341, 342, 353, 356, 359, 363, 404, 428, 440, 457, 41, 477, 483, 484, 486, 538, 555, 641, 652, 656, 660, 663, 694, 740, 733, 799, 854, 856, 862, and 875 in relation to Env sequences of LAV_{BRU}, LAV_{ARV2}, and LAV_{ELI}; wherein said peptide binds to antibodies in AIDS patient sera; and wherein said antibodies are capable of binding to viral antigens encoded by the LAV_{MAL} molecular clone having C.N.C.M. accession number I-641.

24. (PREVIOUSLY PRESENTED) The peptide of claim 23, wherein said peptide is generated by chemical cleavage.

25. (PREVIOUSLY PRESENTED) The peptide of claim 23, wherein said peptide is expressed from a recombinant DNA.

26. (PREVIOUSLY PRESENTED) The peptide of claim 23, wherein said peptide is generated by chemical synthesis.

27. (PREVIOUSLY PRESENTED) A method for detecting antibodies to HIV and neutralizing antibodies to HIVgp120 in an immunoassay by using the peptide of claim 23 as an immunosorbent.

28. (PREVIOUSLY PRESENTED) A method of eliciting neutralizing antibodies to HIV in a mammal by introducing into a mammal the peptide of claim 23.

29.-30. (CANCELED)

31. (NEW) The peptide of claim 23, wherein the peptide comprises at least one of the following conserved sequences: positions 37-130, 211-289, 488-530, 490-620, 531-877, and 680-700 of Env as shown in Fig. 3E-F.

32. (NEW) A method for detecting antibodies to HIV and neutralizing antibodies to HIVgp120 in an immunoassay by using as the peptide of claim 31 as an immunosorbent.

33. (NEW) A method of eliciting neutralizing antibodies to HIV in a mammal by introducing into a mammal the peptide of claim 31.

34. (NEW) An immunogenic, HIV-1 Env peptide of at least 21 amino acid residues of LAV_{MAL} Env sequences in Figures 3E -3F having at least one amino acid substitution consisting of an amino acid substitution at one or more of positions 8, 9, 90, 102, 131, 133, 140, 156, 172, 177, 179, 185, 188, 192, 198, 207, 209, 290, 305, 308, 323, 333, 335, 337, 341, 342, 353, 356, 359, 363, 404, 428, 440, 457, 41, 477, 483, 484, 486, 538, and 555, 641, 652, 656, 660, 663, 694, 740, 733, 799, 854, 856, 862, 875; wherein said peptide binds to antibodies in AIDS patient sera; and wherein said

antibodies are capable of binding to viral antigens encoded by the LAV_{MAL} molecular clone having C.N.C.M. accession number I-641.

35. (NEW) The peptide of claim 34, wherein the peptide has 21 amino acids.
36. (NEW) The peptide of claim 34, wherein the peptide has 43 amino acids.
37. (NEW) The peptide of claim 34, wherein the peptide has 79 amino acids.
38. (NEW) The peptide of claim 34, wherein the peptide has 94 amino acids.
39. (NEW) The peptide of claim 34, wherein the peptide has 131 amino acids.